

Watershed Protection Program

Phone: (888) 846-0800 Fax: (858) 495-5263

Equine Facilities

Stormwater Best Management Practices (BMPs)

Releasing pollutants directly or indirectly into the storm drain system or waterways is a violation of the County Watershed Protection Ordinance (WPO). Below is a list of best management practices (BMPs) that may be applicable to your operations. This list is not all inclusive; refer to the WPO for further details. For more information, call your inspector or the Stormwater Hotline at (888) 846-0800.

Horse facilities can prevent pollution by eliminating runoff of sediment and by properly managing wastes such as manure, urine, and soiled bedding. Waste and sediment have the potential to contaminate water due to biological and chemical properties that can be harmful to plants, animals, and people.

- <u>Nutrients</u> from horse feed, manure, or urine in runoff can pollute drinking water and cause other detrimental effects on wildlife. Infants who consume water containing nitrates are at risk for developing a condition known as "blue baby syndrome", which reduces the amount of oxygen in the blood. Additionally, the health of aquatic ecosystems depends on the balance of oxygen and nutrients in the water. When even a small amount of organic matter, such as manure, enters the water and decomposes the decaying matter releases nutrients into the water and can lead to a rapid increase in bacteria and algae. These organisms consume the oxygen in the water which can lead to a die-off of plants and fish, often resulting in unpleasant odors. By removing the organic matter, these conditions can be reversed, allowing the ecosystem to recover but recovery is not immediate.
- <u>Bacteria, viruses and other pathogens</u> in manure can threaten the health of humans, horses, and wildlife. These harmful pathogens in run-off, can be carried downstream into creeks, streams, drinking water reservoirs and eventually, into the ocean. Bacteria, viruses and other pathogens can cause beach closures, contaminate drinking water and make people sick.
- Soil erosion from your property can be accelerated by rain, wind and water runoff. When soil enters streams, it can reduce light, increase the water temperature and smother fish and invertebrates. Soil may contain heavy metals that can contaminate fish and make them unsafe to eat.

The WPO requires the following:

- 1. Manure from confined livestock, horses or other large animals, which could enter receiving waters or the stormwater conveyance system, must be cleaned up at least twice weekly. Manure may be composted or may be stored (for off-site disposal) in a manner that prevents contact with runoff.
- 2. Areas used for composting manure must be located, configured or managed to prevent runoff to the stormwater conveyance system and receiving waters.
- 3. Pet waste from small animals (cats and dogs) cannot be allowed to enter the stormwater conveyance system or receiving waters. Clean up after your small pets and properly dispose of waste at least weekly.
- **4.** Animal wash racks at equestrian facilities may not discharge to the stormwater conveyance system or receiving waters.





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Horse Waste Management includes cleaning up manure and soiled bedding on a regular basis, especially during wet weather. Other important BMPs include the following:

	Store manure on an impervious surface, such as concrete, to prevent runoff.
	Manure storage under an approved cover may also be required. A tarp is generally considered a temporary cover.
	Locate your facilities and activities away from waterways, flood-prone areas and steep hillsides.
	Use grass swales and berms to divert rain and stormwater run-on from contacting contaminants and carrying them off site.
	Divert downspouts and drains, as well as water that has contacted manure and other pollutants, to pervious vegetated areas that will absorb and filter runoff from roofs.
	Separate corrals, paddocks and manure storage areas from waterways by planting and maintaining vegetation between these areas. Vegetation slows water velocity, increases absorption, reduces runoff volume and helps filter out pollutants.
	Construct and maintain trails, arenas, roads and parking areas to minimize the discharge of sediment and petroleum products. Use dry cleanup methods regularly in parking areas and on-site roads to remove dirt and other contaminants that could enter waterways.
	Protect soil by planting and maintaining vegetation. Protect disturbed slopes from erosion.
	Contain and cover stockpiles of materials such as soils, fertilizer and potting material.
	Consider composting horse manure. Composting manure can be less costly than hauling it away and makes an excellent soil amendment. For recycling information, please contact the County Recycling Program at (877) R-1 EARTH or (877) 713-2784. (Note: Some activities like composting may require additional permits.)
	For information on composting, grading and zoning-related issues, please call Planning and Development Services at (858) 565-5981. Their phone lines are "open" $M-F$ from 8:00 am $-$ 11:45 am.
Inspect Your Operation	
	Review the operations and procedures related to protecting the stormwater conveyance system and receiving waters from pollutants at least annually. Maintain documentation of the annual review on site.
	Inspect your facility annually for stormwater and non-stormwater runoff. Ensure that all non-stormwater discharges are eliminated or captured for recycle, reuse, or proper disposal.
	Eliminate any illicit connections or illegal discharges to the storm drain system or receiving waters.
	Review your Stormwater Pollution Prevention Plan (SWPPP) and other related documents to ensure they are up to date. Update the plan to reflect any changes that have been implemented.
	All stormwater-related documentation, including training records, SWPPP, annual facility self-inspection, etc., shall be kept on site. Provide documentation to the County inspector upon request.

The Watershed Protection, Stormwater Management, and Discharge Control Ordinance may be found at www.sdcdpw.org/WPO

Additional BMP information may be found in the BMP Toolbox at www.projectcleanwater.org/bmp



Revised: June 2013